

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
27 October 2005 (27.10.2005)

PCT

(10) International Publication Number  
**WO 2005/101000 A2**

(51) International Patent Classification?: **G01N 33/574**

(21) International Application Number:  
PCT/US2005/008957

(22) International Filing Date: 18 March 2005 (18.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/557,704 31 March 2004 (31.03.2004) US

(71) Applicant (for all designated States except US):  
**TROPHOGEN, INC.** [US/US]; 6 Taft Court, Suite  
150, Rockville, MD 20850 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SKUDLINSKI,**  
**Mariusz, W.** [US/US]; 6 Taft Court, Suite 150, Rockville,  
MD 20850 (US). **WEINTRAUB, Bruce, D.** [US/US]; 6  
Taft Court, Suite 150, Rockville, MD 20850 (US).

(74) Agents: **TUSCAN, Michael, S.** et al.; Morgan, Lewis &  
Bockius LLP, 1111 Pennsylvania Avenue, NW, Washing-  
ton, DC 20004 (US).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AF, AG, AI, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,  
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,  
ZM, ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SI, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— without international search report and to be republished  
upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

WO 2005/101000 A2

(54) Title: **HUMAN GLYCOPROTEIN HORMONE SUPERAGONISTS AND USES THEREOF**

(57) Abstract: The present invention provides improved methods of imaging, targeted therapy and detection and diagnostics using modified glycoprotein hormones having increased activity over wild-type hormones.